



BOROUGH OF MIDDLETON.

ANNUAL REPORT

TO THE

EDUCATION COMMITTEE

ON THE

Medical Inspection of School Children

For the year 1920, by

ALFRED BALL, M.D., D.P.H.

SCHOOL MEDICAL OFFICER.

School Clinic,
Middleton,

March, 1921.

To the Chairman and Members of the Education Committee.
Mr. Chairman, Madam, and Gentlemen,—

I beg to present the following report for the year 1920 on the work carried out in connection with the Public Elementary Schools in the Borough, under the Education (Administrative Provisions) Act, 1907.

Routine Medical Inspection was concerned with entrants, children of eight years of age, and leavers, the total number thus examined being 1,116.

The Minor Ailments Clinic and the Eye Clinic continued to work satisfactorily while open.

The provision of new premises in Durnford Street for use as a School Clinic is a hopeful augury for the increasing usefulness of the medical activities for which the Education Committee is responsible.

The outbreak of Smallpox led to the closing of all the Schools in October and the cessation of the work of the different clinics wherein risk of infection would have arisen from the congregation of the children.

Dental treatment is urgently required by many of the children attending the Schools, and this important subject is one to which your attention would be well directed during the present year.

The special consideration required by Backward and Mentally and Physically Defective Children is another very important matter.

Finally, I desire to tender my best thanks for the help and support you have given me during the past year.

ALFRED BALL.

SCHOOL ACCOMMODATION.

There are 12 Public Elementary Schools, with 23 departments, and accommodation for 1,823 infants and 3,449 senior children, in the Borough.

Number of Children on Register, January, 1920...	4250
" " " " " 1921...	4204
Number of Half-timers, January, 1919	242
" " " " 1920	306
" " " " 1921	335

Included in the above are 174 children living in Middleton who are on the registers of two Elementary Schools in Chadderton, also 47 Chadderton children who attend Middleton Schools.

Although the number of children on the registers is less than the total accommodation available in the whole district, the distribution of the school places does not coincide exactly with the density of the population. In some of the parts of the Borough, where housing schemes are being pushed forward, the Council will have to consider the building of new elementary schools in the near future.

The renovating, cleaning, and decorating of the schools, which had been postponed during the war, have been proceeded with.

Alterations and decorating have been carried out during the year at Durnford Street, Elm Street, Rhodes Council, Rhodes Infants, St. Peter's, and Tonge Schools.

PREVALENCE OF INFECTIOUS DISEASE.

Measles, which is no longer compulsorily notifiable, was very prevalent in the first quarter of the year, when 260 cases occurred, following on the outbreak in the autumn of 1919.

Altogether, 293 cases of Measles were reported during the year, of whom 185 were of school age.

All cases were visited and 25 revisits were paid by the Health Visitor or School Nurse, suitable advice was given, and in all the serious cases the parents were urged to call in the family doctor.

Mumps was especially prevalent in the Spring, and the absences through this cause affected the school attendance considerably.

Sixty-eight cases of Whooping Cough, 60 cases of Chickenpox, and 174 cases of Mumps were reported by Head Teachers. There were 27 cases of Scarlet Fever, 25 of Diphtheria, and 45 of Smallpox notified by Medical Practitioners. Cases of absence from School through sickness of all forms reported by Teachers numbered 861.

School Closure.

Owing to an outbreak of Smallpox in the Borough the Durnford Street and Rhodes Schools were closed on October 18th, and all the remaining Schools on the following day. The whole of the Schools remained closed until the end of the year.

Physical Education.

A Games Instructor was appointed by the Council, to commence duties on 19th January, 1920.

His duties consist mainly of the class instruction of games in the Elementary Schools.

During the year he has visited every School in the Borough.

SCHOOL CLINIC.

The Education Committee having recognised the necessity to provide better accommodation for the use of the School Medical Department than that in the Post Office Buildings, it was decided, in view of the present difficulties in connection with building, to purchase an army hut from the Disposals Board, to erect this on land belonging to the Corporation situated behind the Old Boar's Head, and to adapt it as a clinic for school children, which could also be used as a centre for Maternity and Child Welfare.

The clinic was completed at the beginning of November, and was then occupied.

The building is a sectional wooden hut, 60 feet long by 15 feet wide, raised from the ground on brick piers.

The walls have been lined internally with match boarding, and the hut has been divided by partitions so as to provide a waiting-room, two consulting rooms, a general office, and a private office.

The clinic is lighted by electricity; it is heated by gas fires and radiators; water is laid on from the town's supply, and hot water is obtained from an automatically regulated gas-heated boiler.

A brick-built water closet has been constructed on the outside of the hut.

Expenditure on the School Clinic.

A sum of £815 6s. 9d. has been expended on the building, and the principal items may be thus summarised:—

	£
Cost of hut	160
Preparing site, building w.c., etc.	126
Carting hut from Bury, and erecting hut	100
Felting roof and eaves guttering	27
Plumbing and internal fittings	57
Supplying and fitting gas stoves and hot water supply	124
Linoleum	52
Lining interior of hut	56
Electric lighting	11
Staining, varnishing, and painting	56
Other miscellaneous items	36
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	£815
Additional furniture	£42

The Inspection and Minor Ailments Clinics are held daily in the new building.

The School Oculist will attend every fortnight to examine children suffering from defective vision, and he will have the use of a small room, which has been fitted with shutters so that it can be used as a dark room.

The School Dentist, when appointed, will work in the larger consulting room, and the smaller adjoining room will serve as a recovery room for the children.

INSPECTION AND MINOR AILMENTS CLINIC.

This was held daily from 9 to 10 o'clock until the occurrence of the Smallpox epidemic, when the meetings were discontinued.

Children suffering from the following conditions attended and received treatment at the Clinic :—

External Eye Disease 53, Ear Disease 8, Ringworm 18, Scabies 46, Impetigo 191, other skin diseases 52, septic abrasions and cuts 183, other diseases 15.

In addition, 228 children were submitted to examination at the instance of parents, teachers or attendance officer, usually with the request for an opinion as to their fitness to attend school.

The total number of children who attended during the year was 828, and they made 4,626 attendances.

193 children were excluded from school for varying periods, in every case a certificate being issued to the Head Teacher and the Attendance Officer, in addition to the parents.

WORK OF THE SCHOOL NURSE

The duties of the School Nurse fall under the following heads :—

(1) Attendance daily at the School Clinic, and the treatment of minor ailments under the supervision of the School Medical Officer; (2) home visiting of children reported absent from school through sickness; (3) assisting the School Medical Officer during routine medical inspection in the school; (4) following up, *i.e.*, home visiting of children found in need of treatment; (5) surprise visits to schools for the purpose of inspections for cleanliness of children.

The following is a summary of the visits paid by the Nurse during the year :—

To cases reported by teachers	849
Following up in connection with medical inspection	274
Assisting at routine inspections in schools	59
Other visits to schools	181
Visits to homes of children who attended Clinic...	206
Re-visits	293

ROUTINE MEDICAL INSPECTION.

Number of visits for medical inspection	59
Number of children inspected	1151

Boys, 554. Girls, 597.

In all cases teachers sent out notices to parents inviting them to be present in school during the examination of their children.

The parents' attendance was 245 with the infants, and 241 with the older children, or 61 per cent. and 33 per cent. respectively.

Inspection was invariably carried out on school premises, with the exception of Parish School, where there is no available accommodation, and a room in the Free Library was used instead.

NUMBERS EXAMINED AT DIFFERENT AGES.

Age	First Inspection		Re-Inspection		Specials	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
4	75	75	...	...	...	...
5	88	86	1	...	...	1
6	23	19	1	2	3	7
7	8	14	3	5	3	3
8	18	14	148	135	4	...
9	2	4	3	2	2	3
10	6	2	1	3	3	...
11	4	5	1	3	1	3
12	2	12	138	175	...	1
13	2	1	14	21	...	1

The record of previous illness was as follows :—

			Measles	Whooping Cough	Chicken Pox	Scarlet Fever	Diphtheria	Pneumonia
Boys	4—6	.....	131	48	47	3	6	26
Girls	4—6	.....	124	44	38	2	5	21
Boys	8	.....	154	63	69	16	5	24
Girls	8	.....	120	76	75	8	9	25
Boys	12—13	.....	152	86	72	25	4	38
Girls	12—13	.....	203	121	115	32	8	40

HEIGHT AND WEIGHT.

The children were weighed and measured in ordinary indoor clothing, but with footgear removed.

BOYS.

GIRLS.

Age.	Average Height	Average Weight	Average Height	Average Weight
4 ...	98.9 cms	36.1 lbs	98.3 cms	34.7 lbs
5 ...	104.1	38.8	100.8	36.9
6 ...	110.0	42.9	107.8	40.7
7 ...	115.9	48.1	113.8	44.6
8 ...	119.8	50.8	117.3	48.2
9 ...	125.0	54.4	121.8	51.4
10 ...	128.3	59.4	134.6	63.2
11 ...	131.8	62.1	133.7	65.0
12 ...	137.7	69.1	137.9	69.2
13 ...	141.0	75.5	142.5	77.1

Children working half-time who were examined numbered 168, consisting of 79 boys and 70 girls aged 12, and 6 boys and 13 girls aged 13.

The average height and weight of the “ Half-timers ” were :—

BOYS.			GIRLS.	
Age.	Average Height	Average Weight	Average Height	Average Weight
12 ...	137.7 cms	69.8 lbs	138 cms	70.8 lbs
13 ...	141.0	76.1	143	77.5

The subjoined table shows the occupations in which the half-time children were engaged :—

	Boys.		Girls.
Cotton Mill	50	...	68
Bleach Works	12	...	3
Print Works	12	...	4
Errands	1	...	0
Farm	2	...	0
Confectioner's Shop ...	1	...	0
Various	7	...	8
Total ...	85	...	83

EMPLOYMENT OF SCHOOL CHILDREN.

Under the provisions of the Education Act, 1918, Section 13 (1) the Town Council adopted a Bye-law permitting the employment of school children from 7 to 8 o'clock a.m. in the delivery of milk and newspapers, also from 5-30 to 6-30 p.m. in any occupation.

This Bye-law came into force on 1st August, 1920.

Children sent for employment under this Section of the Act must be examined by the School Medical Officer, and if in his opinion their health is not likely to be impaired by the occupation, they are furnished with a certificate to that effect.

During the period in which the Bye-law was operative twelve children were examined by the School Medical Officer and certificates for employment were granted to 10 boys and 1 girl.

CLOTHING AND FOOTGEAR.

BOYS.			GIRLS.		
	Number.	Per-centage.		Number.	Per-centage.
Clothing sufficient	533	99	574	99	
Insufficient Clothing...	5	0.9	4	0.7	
Bad Footgear	3	0.5	2	0.3	

CLEANLINESS.

BOYS.			GIRLS.		
	Number.	Per-centage.		Number.	Per-centage.
Clean Head and Body	479	90.7	240	41.5	
Fleabitten	59	11.1	85	14.7	
Nits or evidence of pediculi	27	5.1	339	58.6	

NUTRITION.

BOYS.			GIRLS.		
	Number.	Per-centage.		Number.	Per-centage.
Normal	463	86	494	85.4	
Slightly defective	71	13	82	14.1	
Bad	4	0.7	2	0.3	

On the whole the children are well nourished, there being only 6 whose nutrition was considered bad,

During the year there has been no necessity for school feeding, under the powers of the Education (Provision of Meals) Acts.

TEETH.

	BOYS.		GIRLS.	
No decay	94	17.4 p.c.	114	19.7 p.c.
Less than 4 decayed	250	46.4 p.c.	272	47.0 p.c.
Four or more decayed	194	36.0 p.c.	192	33.2 p.c.

From the above table it will be seen that dental caries is found at medical inspection to the extent of over 80 per cent. of all children examined. A more detailed examination by a dentist would probably reveal even more decay. This represents a good deal of avoidable suffering for the children, resulting in broken sleep, ill-health, and to some extent the loss of school attendance. The establishment of a dental clinic, in which the treatment and preservation of the teeth of the younger children can be attended to, will be a measure of great and lasting good.

DISEASES OF THE HAIR AND SKIN.

The cases found during routine inspection were:—

	Boys.	Girls.
Ringworm	2	1
Impetigo	7	6
Scabies	0	2
Other diseases	9	13
Total ...	18	22

ENLARGED TONSILS AND ADENOIDS.

	Boys.	Girls.
With Tonsils and Adenoids needing treatment	5	8
With Tonsils and Adenoids not requiring operation at present	110	160
Mouth Breathers	16	18

Of the above cases, only the worst were advised to seek hospital treatment; many of the others would probably have benefited by operation, but as there was no urgency their names were noted for further examination at a subsequent visit to the school.

Other abnormal conditions observed were: Postnasal Catarrh, 5; Nasal Spur, 2; Deformity of Palate, 24; Nasal Polypus, 1.

DEFECTIVE HEARING AND EAR DISEASE.

The following conditions were found: Otorrhœa, 13; Cerumen, 1; Defective Hearing, 19.

ADENITIS.

Enlarged cervical and submaxillary glands are of frequent occurrence among school children, and are usually caused by unhealthy conditions of the skin or throat and mouth. There were 107 cases with lesser enlargement, and 4 in which the swelling was more marked.

GOITRE.

Enlargement of the thyroid gland is not uncommon especially among girls. It was noticeable in 58 cases, but did not cause any symptoms.

DEFECTIVE SPEECH.

There were 6 cases of defective speech, occurring in younger children..

RICKETS AND DEFORMITIES.

In 21 children were found bony deformities produced by long-standing rickets in early years; these included 3 cases of bowlegs.

Other deformities included Congenital Dislocation of Hip, 1; Scoliosis, 1.

TUBERCULOSIS.

Five children, showing signs suspicious of phthisis, and two children with other forms of Tuberculosis, were sent to the Tuberculosis Dispensary for Dr. Stewart's opinion.

Cases among children of school age notified during the year were: Tuberculosis of Lungs, 2; Tuberculosis of the Cervical Glands, 4.

HEART AND CIRCULATION.

There were 14 cases of organic disease of the heart, and 3 others in which some degree of functional disorder was found. The cases of anæmia numbered 14.

EYESIGHT.

The eyesight of 713 children was tested, of whom 406, or 76 per cent., had normal vision. Of those children whose vision was tested, 15 per cent. of the boys, and 18 per cent. of the girls, had defective vision.

The following table shows the degree of defect:—

			Boys.		Girls.
6/12	R	.....	32	.....	41
	L	.....	35	.....	42
6/18	R	.....	20	.....	25
	L	.....	20	.....	22
6/24	R	.....	6	.....	11
	L	.....	4	.....	15
6/36	R	.....	6	.....	12
	L	.....	6	.....	9
6/60	R	.....	1	.....	3
	L	.....	1	.....	1
6/∞	R	.....	1	.....	0
	L	.....	1	.....	0

There were 50 children examined at routine inspection who were already wearing spectacles.

Cases of external eye disease included Blepharitis, 16; Conjunctivitis, 3.

All children found to have squint or vision worse than 6/12 in one eye or both eyes were referred to the oculist for detailed examination.

Those children who have previously been provided with spectacles are kept under observation at each visit to the schools.

The following is a statement in tabular form of the children referred to the school oculist:—

Primary Examination.

Number asked to attend for examination ...	135
Did not attend	19
Left School	1
Glasses obtained	88
Glasses not required	3
Failed to obtain Glasses	24
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Total examined ...	115
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Re-examinations.

Obtained new glasses	58
Glasses need not be changed	3
Cases to be kept under observation	2
Operation	1
Failed to have glasses changed	10
Did not attend	5
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Total re-examined	79
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Of the above, in 8 cases the Education Committee bore the whole or a part of the cost of the spectacles, as the circumstances of the parents were such that they could not meet the charge.

In concluding this report, I desire to acknowledge the untiring energy and zeal with which Nurse Boardman and Miss Phillips have worked under the Education Committee, and to offer them my best thanks for the great assistance which they have given me in my work among the school children of the Borough.

ALFRED BALL.

TABLE I.—NUMBER OF CHILDREN INSPECTED

1st JANU. TO 31st DEC., 1920.

A. Code Groups.

Entrants.						Intermediate group.
Age	4	5	6	Other ages	Total	8
Boys ...	75	89	24	11	199	166
Girls ...	75	86	21	19	201	149
Totals	150	175	45	30	400	315

Leavers.						Grand Total.
Age	12	13	14	Other ages	Total	
Boys ...	140	16	...	17	173	538
Girls ...	187	22	...	19	228	578
Totals	327	38	...	36	401	1116

B. Groups other than Code.

	Special Cases.	No. Re-examined.
Boys	408	618
Girls	413	621
Totals	821	1239

C. Number of individual children examined was 2,372.

TABLE II.—RETURN OF DEFECTS FOUND IN THE
COURSE OF MEDICAL INSPECTION IN 1920.

Defect or Disease.					Code Groups.		Specials.	
					Referred for Treatment.	Requiring to be kept under observation only.	Referred for Treatment.	Requiring to be kept under observation only.
(1)	(2)	(3)	(4)	(5)				
Malnutrition ...	6	...	...	2				
Uncleanliness, Head ...	368	...	10	...				
„ Body ...	144	...	...	...	
Skin. Ringworm, Head ...	3	...	12	2				
„ Body ...	...	...	6	...				
Scabies ...	3	...	47	...				
Impetigo ...	12	...	193	...				
Other diseases ...	30	...	55	1				
Eye. Blepharitis ...	17	...	18	...				
Conjunctivitis ...	2	...	29	...				
Keratitis ...	...	...	2	...				
Corneal Ulcer ...	...	...	...	...
Corneal Opacities ...	...	2	...	...		
Defective Vision ...	62	55	25	1				
Squint ...	7	8	...	...		
Other conditions ...	...	4	7	1				
Ear. Defective hearing ...	7	6	1	...				
Otitis Media ...	11	...	8	...				
Other ear disease ...	1	...	...	...	
Nose and Throat—								
Enlarged Tonsils ...	10	4	1	6				
Adenoids ...	...	1	...	2				
Enlarged Tonsils and Adenoids ...	4	2	1	...				
Defective speech ...	...	6	...	...		
Heart and Circulation—								
Organic heart disease ...	...	3	...	...		
Functional ...	14	...	...	2				
Anæmia ...	...	...	...	...
Lungs—								
Definite Tuberculosis ...	2	...	...	...	
Suspected ...	1	4	...	1				
Chronic Bronchitis ...	...	...	6	...				
Other diseases ...	...	...	...	...
Nervous System—								
Epilepsy ...	...	2	...	...		
Chorea ...	...	...	5	...				
Other diseases ...	...	1	1	...				
Nonpulmonary Tuberculosis—								
Glands ...	...	...	1	...				
Bones and Joints ...	...	...	...	...
Other forms... ...	3	...	...	1				
Rickets ...	2	16	4	1				
Other Deformities ...	...	4	1	...				
Other defects or diseases ...	3	9	340	46				

TABLE III.—NUMERICAL RETURN OF ALL EXCEPTIONAL CHILDREN IN THE AREA IN 1920.

		Boys.	Girls.	Total.
Blind (including partially blind).	Attending Public Elementary Schools ...	2	4	6
	Attending Certified Schools for the Blind	...	...	...
	Not at School	...	1	1
	Attending Public Elementary Schools ...	3	1	4
Deaf and Dumb (including partially deaf).	Attending Certified Schools for the Deaf	...	...	...
	Not at School	...	...	...
	Attending Public Elementary Schools ...	25	17	42
	Attending Certified Schools for Mentally Defective Children	...	...	...
Mentally Deficient	Notified to the Local (Control) Authority during the year	...	...	...
	Not at School	...	...	...
	At School	...	1	1
	Not at School	...	...	...
Imbeciles.	...	1	1	2
	Attending Public Elementary Schools ...	7	4	11
	Attending Certified Schools for Epileptics	...	1	1
	Not at School	...	1	1
Epileptics.	Attending Public Elementary Schools ...	10	4	14
	Attending Certified Schools for Physically Defective Children	...	...	...
	Not at School	...	...	...
	Attending Public Elementary Schools ...	13	10	23
Pulmonary Tuberculosis.	Attending Certified Schools for Physically Defective Children	...	...	...
	Not at School	...	...	...
	Attending Public Elementary Schools ...	...	...	...
	Attending Certified Schools for Physically Defective Children	...	...	...
Other forms of Tuberculosis.	Not at School	...	...	...
	Attending Public Elementary Schools ...	...	...	...
	Attending Certified Schools for Physically Defective Children	...	...	...
	Not at School	...	...	...
Cripples other than Tubercular	Attending Public Elementary Schools ...	12	8	20
	Attending Certified Schools for Physically Defective Children	...	...	...
	Not at School	...	...	...
	Retarded 2 years	1	1	2
Dull or Backward.*	Retarded 3 years	18	15	33
	...	6	1	7

* Judged according to age and standard.

TABLE IV.—TREATMENT OF DEFECTS OF
CHILDREN DURING 1920.

A.—Treatment of Minor Ailments.

Disease or Defect	Number of Children.			
	Referred for Treatment.	Treated.		
		Under Local Education Authority's Scheme	Otherwise.	Total.
Skin—				
Ringworm—				
head	12	11	1	12
Ringworm—				
body	6	6	...	6
Scabies	50	50	...	50
Impetigo ...	208	205	3	208
Minor Inj'r's	197	197	...	197
Other Skin				
disease ...	82	78	4	82
Ear disease ...	28	8	20	28
Eye disease (ex- ternal and other)	86	57	29	86
Miscellaneous..	159	151	5	156

B.—Treatment of Visual Defect.

Number of Children.									
Referred for Refraction.	Submitted to Refraction				For whom glasses were prescribed.	For whom glasses were provided.	Recommended for Treat- ment other than glasses.	Received other Forms of Treatment.	For whom no treatment was considered necessary.
	Under Local Educa- tion Authority's Scheme — Clinic or Hospital.	By Private Practi- tioner or Hospital.	Otherwise.	Total.					
234	214	...	...	214	203	169	1	1	8

C.—Treatment of Defects of Nose and Throat.

Referred for Treatment.	Number of Children.			
	Received Operative Treatment.			Received other Forms of Treatment
	Under Local Education Authority's Scheme— Clinic or Hospital	By Private Practitioner or Hospital.	Total.	
37	9	9	18	1

25 debilitated children of school age were sent to Lytham, under the auspices of the Poor Children's Aid Society, for a period of 2 or 3 weeks, at a Convalescent Home, and derived much benefit from their holiday.

**TABLE V.—TREATMENT OF DEFECTS FOUND
IN 1920.**

Condition.	No. of defects for which Treatment was necessary.			No report available.	No. of defects treated.	Results.			No. not treated
	Old Cases	New Cases	Total.			Remedied	Improved	Unchanged	
Clothing .....	...	9	9	...	9	9	...	...	...
Footgear .....	...	5	5	...	5	5	...	...	...
Cleanliness, Head ...	...	41	41	2	39	38	1	...	...
Cleanliness, Body ...	...	6	6	3	3	2	1	...	...
Nutrition	17	12	29	12	15	7	4	4	2
Nose and Throat ...	44	14	58	15	25	20	5	...	18
External Eye Disease	45	57	102	12	90	75	9	6	...
Ear Disease	19	11	30	4	26	19	6	1	...
Teeth .....	...	...	...	...	...	...	...	...	...
Heart & Circulation	22	2	24	8	13	3	5	5	3
Lungs	3	2	5	3	2	...	2	...	...
Nervous System ...	3	3	6	2	4	1	1	2	...
Skin	8	320	328	1	327	322	4	1	...
Rickets	22	3	25	3	10	...	9	1	12
Deformities	11	2	13	4	5	...	4	1	4
Tuberculosis Non-Pulmonary	14	1	15	7	7	4	2	1	1
Speech	24	2	26	6	14	4	10	...	6
Mental Condition ...	44	2	46	8	...	...	...	...	38
Vision and Squint ...	154	71	225	8	172	141	...	31	45
Hearing	33	3	36	7	24	3	19	2	5
Miscellaneous	10	373	383	3	379	374	3	2	1

**TABLE VI.—SUMMARY RELATING TO CHILDREN
MEDICALLY INSPECTED AT THE ROUTINE
INSPECTIONS DURING THE YEAR 1920.**

(1) The total number of children medically inspected at the routine inspections *	1116
(2) The number of children in (1) suffering from—	
Malnutrition	6
Skin disease	48
Defective Vision (including Squint)	132
Eye disease	19
Defective Hearing	13
Ear Disease	12
Nose and Throat Disease	28
Enlarged Cervical Glands (Non-Tubercular)...	25
Defective Speech	6
Dental Disease	908
Heart Disease—	
Organic	14
Functional	3
Anæmia	14
Lung Disease (Non-Tubercular)	19
Tuberculosis—	
Pulmonary :	
Definite	2
Suspected	5
Non-pulmonary	3
Disease of the Nervous System	3
Deformities	4
Other defects and diseases	12
(3) The number of children in (1) suffering from defects (other than uncleanness or defective clothing or footgear) who require to be kept under observation (but not referred for treat- ment)	261

- (4) The number of children in (1) who were referred for treatment (excluding uncleanliness, defective clothing, etc.) 173
- (5) The number of children in (4) who received treatment for one or more defects (excluding uncleanliness, defective clothing, etc.) 126

* "Specials" excluded.